

## PRESS RELEASE



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### Rest Is Not Idleness: Reflection Is Critical for Development and Well-Being

Tags: Cognitive Development, Perspectives on Psychological Science, Reasoning, Reflection, Thinking, Well-Being

As each day passes, the pace of life seems to accelerate – demands on productivity continue ever upward and there is hardly ever a moment when we aren't, in some way, in touch with our family, friends, or coworkers. While moments for reflection may be hard to come by, a new article suggests that the long-lost art of introspection —even daydreaming — may be an increasingly valuable part of life.

In the article, published in the July issue of *Perspectives on Psychological Science*, a journal of the Association for Psychological Science, psychological scientist Mary Helen Immordino-Yang and colleagues survey the existing scientific literature from neuroscience and psychological science, exploring what it means when our brains are 'at rest.'

In recent years, researchers have explored the idea of rest by looking at the so-called 'default mode' network of the brain, a network that is noticeably active when we are resting and focused inward. Findings from these studies suggest that individual differences in brain activity during rest are correlated with components of socioemotional functioning, such as self-awareness and moral judgment, as well as different aspects of learning and memory. Immordino-Yang and her colleagues believe that research on the brain at rest can yield important insights into the importance of reflection and quiet time for learning.

"We focus on the outside world in education and don't look much at inwardly focused reflective skills and attentions, but inward focus impacts the way we build memories, make meaning and transfer that learning into new contexts," says Immordino-Yang, a professor of education, psychology and neuroscience at the University of Southern California. "What are we doing in schools to support kids turning inward?"

Accumulated research suggests that the networks that underlie a focus inward versus outward likely are interdependent, and our ability to regulate and move between them probably improves with maturity and practice. While outward attention is essential for carrying out tasks and learning from classroom lessons, for example, the reflection and consolidation that may accompany mind wandering is equally important, fostering healthy development and learning in the longer term.

"Balance is needed between outward and inward attention, since time spent mind wandering, reflecting and imagining may also improve the quality of outward attention that kids can sustain," says Immordino-Yang.

She and her colleagues argue that mindful introspection can become an effective part of the classroom curriculum, providing students with the skills they need to engage in constructive internal processing and productive reflection. Research indicates that when children are given the time and skills necessary for reflecting, they often become more motivated, less anxious, perform better on tests, and plan more effectively for the future.

And mindful reflection is not just important in an academic context – it's also essential to our ability to make meaning of the world around us. Inward attention is an important contributor to the development of moral thinking and reasoning and is linked with overall socioemotional well-being.

Immordino-Yang and her colleagues worry that the high attention demands of fast-paced urban and digital environments may be systematically undermining opportunities for young people to look inward and reflect, and that this could have negative effects on their psychological development. This is especially true in an age when social media seems to be a constant presence in teens' day-to-day lives.

"Consistently imposing overly high-attention demands on children, either in school, through entertainment, or through living conditions, may rob them of opportunities to advance from thinking about 'what happened' or 'how to do this' to constructing knowledge about 'what this means for the world and for the way I live my life,'" Immordino-Yang writes.

According to the authors, perhaps the most important conclusion to be drawn from research on the brain at rest is the fact that all rest is not idleness. While some might be inclined to view rest as a wasted opportunity for productivity, the authors suggest that constructive internal reflection is critical for learning from past experiences and appreciating their value for future choices, allowing us to understand and manage ourselves in the social world.

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For more information about this study, please contact: Mary Helen Immordino-Yang at [immordin@usc.edu](mailto:immordin@usc.edu).

*Perspectives on Psychological Science* is ranked among the top 10 general psychology journals for impact by the Institute for Scientific Information. It publishes an eclectic mix of thought-provoking articles on the latest important advances in psychology. For a copy of the article "Rest Is Not Idleness: Implications of the Brain's Default Mode for Human Development and Education" and access to other *Perspectives on Psychological Science* research findings, please contact **Anna Mikulak** at 202-293-9300 or [amikulak@psychologicalscience.org](mailto:amikulak@psychologicalscience.org).

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